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09/849,594	05/04/2001	Daniel J. Sorensen	KCC-15,481	8899
35844	7590	04/21/2005	EXAMINER	
PAULEY PETERSEN & ERICKSON 2800 WEST HIGGINS ROAD HOFFMAN ESTATES, IL 60195			COLE, ELIZABETH M	
			ART UNIT	PAPER NUMBER
			1771	

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Application Number: 09/849,594  
Filing Date: May 04, 2001  
Appellant(s): SORENSEN ET AL.

\_\_\_\_\_  
Melanie Rauch  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 1/27/05.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

EP 0,677,284A!	Kielpikowski	10-1995
5,624,420	Bridges et al	4-1997

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3-10, 12-16, 18-29, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridges et al, U.S. Patent No. 5,624,420 in view of EP 0,677,284. Bridges et al discloses a bonded material comprising first and second layers of liquid impermeable material which are at least partially overlapped and which comprise a plurality of ultrasonic bond points which bond the layers together. The bond points are aligned in at least two parallel rows and are offset from another. See figs. 1A – 1H. The point bonds may have a diameter of about 0.05 inches and the bond points may be spaced about 0.01 inches from each other. See col. 7, lines 23-55. The first and second layers may comprise plastic films and nonwoven webs. See col. 8, lines 22-57. A preferred material for the first and second layer is Series 6700 Nonwovens, which is a breathable material, (see col. 4, lines 17-35 of U.S. Patent No. 5,622,589). Bridges et al also discloses diapers, training pants and other hygiene articles which comprise the bonded material. Bridges et al also teaches a method of bonding two layers of liquid impermeable material comprising the steps of ultrasonically bonding the layers together with point bonds and displacing portions of each layer of material. See col. 7, lines 1-22. As seen in Fig. 1E each of the bond points in each of the rows are equally spaced.

Bridges differs from the claimed invention because Bridges does not teach that at least one of the bond points in each of the row is equally spaced apart from at least three other bond points. However, Bridges does teach at col. 6, lines 25-41 that the size, shape and spacing of the bonds may be varied by those having ordinary skill in the art in order to balance the needs of strength and tearability, in view of the particular

materials and processing parameters employed. EP '284 teaches that a configuration wherein at least one of the bond points in each of the rows is equally spaced apart from at least three other bond points as shown in Fig. 4 as bond element 25 allows a sufficiently strong, yet soft and flexible bonded material to be formed without the need for additional adhesive. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the bonds in Bridges according to the pattern shown in Fig. 4 of '284. One of ordinary skill in the art would have been motivated to form the bonds according to the pattern of Fig. 4 of EP '284 because this configuration of points bonds imparts excellent strength to the bonded material, while still being soft and flexible.

#### **(10) Response to Argument**

Appellant argues that the seam formed in Bridges is not likely to be leak proof. However, while the seam is designed to be able to be tearable, it is also designed not open during use. See col.6, lines 59-67. Appellant also argues that bonding pattern of Bridges would not "likely" prevent leakage. However, Appellant has not presented any evidence to support this. Bridges employs water proof layers such as films to form the two layers and does not form a perforated tear line to avoid perforating the films, which would cause leakage. Also, in the art of diapers, training pants and other similar hygiene articles, it is known that leakage is always undesirable. Therefore, in view of the fact that Bridges teaches bonding impermeable films via ultrasonic bonding, does not perforate the layers and teaches the same spacing of the bond points, it is the examiner's position that the seam of Bridges is leak proof.

Appellant argues that the bond in Bridges is weaker than the instantly claimed bond and that the instantly claimed bond would therefore have both a reduced incidence of tearing and would prevent leakage. However, there is nothing on the record to equate bond strength with leakage prevention. Additionally, there is nothing in the claims that recites a particular bond strength.

Appellant argues that since the bond line of Bridges is designed to be tearable there is nothing in the art that would lead one of ordinary skill in the art to modify the bond line so that it would be leak proof. However, as set forth above, there is nothing on the record that shows that a weaker bond would be any less likely to leak than a stronger bond. The spacing of the bond elements in the claimed invention and in Bridges is the same. The only difference is that Bridges does not show a pattern wherein at least one of the bond points in each of the row is equally spaced apart from at least three other bond points. This feature is shown in EP '284.

Appellant argues that Bridges does not teach employing impermeable first and second layers. However, Bridges clearly teaches employing film layers as the first and second layers. Appellant argues that the layers would have to be perforated or coated which would somehow render them permeable. However, there is nothing at all on the record to support this assertion. Polymeric films are liquid impermeable. Bridges teaches employing polymeric films as the first and second layers. Therefore Bridges teaches employing liquid impermeable layers.

Appellant argues that Bridges bonds the top and bottom layers of the absorbent article between which the absorbent material is placed. However, the bonding of

Bridges is at the "chassis" of the diaper. See for example figure 6A which shows the top and bottom layers 46 and 48 which are bonded directly to each other. The top layer of Bridges does not cover the absorbent core which is located in the crotch portion of the diaper.

Appellant argues that EP '284 does not remedy the deficiencies of Bridges because EP '284 teaches spacing the bond points relatively far apart. However, the portion at col. 10 to which Appellant refers is discussing figure 3 but figure 4 is what is relied on in the office action. Additionally, there is no disclosure of spacing in EP '284, so saying they are relatively far is meaningless. EP '284 discloses particular bond patterns which are strong, yet also soft and flexible. Bridges teaches that the strength of the seam should be optimized so that it is sufficiently strong yet still able to be torn. See col. 6, lines 25-41. Therefore, since EP '284 teaches that the pattern of figure 4 produces a strong yet soft seam without the need for extra adhesive, it would have been obvious to one of ordinary skill in the art to have employed the particular bonding pattern of EP '284 in the seam of Bridges in order to form a sufficiently strong bond.

Appellant again argues that neither Bridges nor EP '284 teach a leak proof seal because the seal of Bridges is tearable. However, as set forth above, there is nothing on the record which equates bond strength with being leak proof. Further, since EP '284 relates to forming containment flaps, which are designed to prevent leaks and hold waste product until it can be absorbed, it is clear that EP '284 relates to forming leak proof seals.

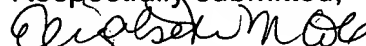
Art Unit: 1771

With regard to the limitation that the seam is along the edges of the films, Bridges clearly shows the tear lines in figure 1 as being located along the edges of the films. Applicant has not quantified "along". Bridges shows the tear line 29 as being located at either side of the front panel along, i.e., in a line with and adjacent to the edge. The instant claims do not require the bond be located directly at the seam portion, but merely recite "along" the edge.

With regard to the containment flap, EP teaches a bond layer which bonds the containment flap to the absorbent article. Se abstract of EP '284.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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Primary Examiner

Art Unit 1771

e.c.

April 11, 2005

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